

Analyzing your
SFA Computing Needs
to be more
Productive and Save Money



We Help Put America Through School



Personal Computers have become indispensable for today's SFA Title IV business processing. It is important that your computer works as hard for you as possible and at the cheapest possible cost. Start by asking the question, "Given the work I do with my computer, how do I decide which hardware and software will provide me the most value?" It is important not to underestimate how rapidly computer technology changes, and to watch industry trends, especially in the internet world. Schools must be able to take advantage of the benefits of e-Commerce--online transactions, dramatically lower transaction costs, and a wide range of new and exciting products and services supported in today's SFA Title IV environment.

■ *Rule # 1 - Don't Panic!*

The minimum hardware requirements for PCs have not changed for today's Title IV business processing. The minimum recommended configuration requirements outlined in this guide start on January 1, 2002.

■ Rule # 2 - There Are No Pat Answers!

Everyone in SFA does something different with their computers, or does similar things in different ways. You will have different answers than your colleagues to the question of what is the best computer for you. These are some of the questions you should ask to begin your analysis:

- For what do you use the computer? Is it a stand-alone machine you use for daily SFA processing? Do you use it for daily office activities? Have you considered the processing peaks in your SFA production schedule?
- What software or programs do you use, and how? Have you examined the minimum requirements for each product you use? Did you consider the requirements for the total suite of products? Have you considered the migration of your current products?
- What benefits do you expect from your computer? Will achieving those benefits alter the ways you use the computer?
- If you upgrade, what will limit the performance of your computer? (See Page 3 for examples)
- If you buy new equipment, how much and what kind of equipment do you need? Did you include a workload analysis based on your production schedule? What are the options in choosing the equipment?
- For both upgrades and new purchases, what are the support and maintenance requirements, and how can your decisions make end-user support easier?
- Once you select a hardware configuration, what are the growth options during the life of the equipment, and what benefits can those options provide? What choices can you make early on to reduce the cost of future growth?



The Minimum Recommended Configuration Requirement

Starting on January 1, 2002

Equipment

- IBM or fully IBM-compatible PC with a Pentium 800 MHz processor or comparable
- 128 MB RAM or more
- 20 GB hard drive or more
- 56K modem (that meets or is upgradable to V.90 standard)
- Windows 95 keyboard
- Microsoft compatible mouse
- Laser printer capable of printing on standard paper (8 1/2 x 11)
- 24x CD-ROM drive or higher, with sound board
- 3.5" High-density double-sided diskettes
- Monitor and video card capable of Super Video Graphics Adapter (SVGA) (800x600) resolution (small fonts only) or higher*

Software

- 32-bit operating system (Microsoft Windows 98, Microsoft Windows NT 4.0., or Microsoft Windows 2000)
- Internet Service Provider (ISP) that supports 56K modem connection or higher

Browser Requirements

- Internet Explorer v4.01 Service Pack 2 or higher
- Netscape Navigator v4.73 or higher

Other

Supported Networks: Windows NT or Novell Netware

Phone Line

Dedicated phone line.

* EDExpress designed in SVGA. You may use a higher resolution than SVGA at your own discretion without adverse impact on EDExpress.



Choke Points--Where your Computer Slows Down

■ Rule # 3 - Bigger is not necessarily better!

The speed at which your computer does a task depends on the amount of information the computer has to handle and the rate at which it can process that information. Computer performance is a balance of the capabilities of the individual components. Deciding how to achieve the performance you want in a computer requires that you understand what factors set the speed of a computer. A "choke point" is a component--usually one of the core elements--that limits the flow of information through the system. Upgrading a "choke point" will net you better performance. Upgrading other components will net you very little until you resolve the "choke point". For help, consult with your IT Department or Hardware/Software Manufacturers and Retailers. To begin your analysis consider the following points:

- You have to do your own analysis to understand what's best for you in your computer. For each element, you should think about each of the following areas:
 - Functionality how well it meets your needs
 - Capacity memory speed and cache
 - Performance software characteristics and production speed
 - Interoperability hardware/software compatibility
 - Maintainability reliability and vendor accessibility
 - Upgradability shelf life
 - Size, Weight, Power, Mobility
- You can evaluate the performance of each of the core elements by looking at how much information is handled, and how often. The core elements of your computer include the processor, bus (protocol used to move information inside the computer), memory, disk, display, modem, and printer. Examples to help start your analysis:

Key Element	Initial Configuration	Upgraded Configuration	Est. Performance Improvement
Processor-to- Memory bus	64 bits (Conventional memory)	64 bits (Synchronous memory)	5 to 10 percent
Second-level Cache	None	256K Write Back	26 to 31 percent
Graphics	VGA via ISA bus	High-performance AGP or PCI VGA	43 percent
Hard disk	15 millisecond	12 millisecond	
	average access time and 64k cache	average access time and 256k cache	11 percent

■ Rule # 4 - Benchmark Your Business Process!

As you run your standard applications using your current configuration carefully document benchmarks regarding performance. This will establish a baseline to compare to your new configuration.



Frequently Asked Questions

■ Why is the Department of Education changing the minimum technical specifications?

Advances in technology make it necessary to update the current minimum technical specifications so that schools may continue the Title IV Delivery process in a timely and cost effective manner. Upgrading to these minimum technical specifications will enable connectivity to a wide array of SFA products and services.

■ When will schools be required to meet the minimum technical standards?

Schools will be required to meet the new minimum technical standards by January 1, 2002 for the 2002-2003 Award Year. Many schools begin 2002-2003 processing in January 2002.

■ Are these system requirements for ALL of my PCs (if I have a networked environment), or only my server PC?

The technical specifications outlined in this guide are standard and readily available in today's market place. At a minimum, your server PC and/or network directory should meet the minimum requirements noted in this announcement. Depending on your particular school size and processing needs, your PC workstations may not need to meet every requirement listed. For example, your workstation hard drive size can probably be less than 20 gigabytes since you will be accessing a database stored on a network.

How might these requirements increase/decrease depending on our student population and/or database size?

The greater the size of your school population and/or Title IV applicant pool, the larger your software database(s) will be. Student population size will likely also increase your workload and processing demands throughout the software. You should consider these requirements as the minimum standard for optimal performance; your school may require a more robust, augmented system if you are handling many thousands of student records.

■ Do I have to use a Pentium processor? What about a Celeron processor?

Pentium processors are the most standard, widely available, reliable PC processors available on the market right now, which is why they are mentioned and specifically recommended. However, the Celeron brand or other brands are also acceptable, as long as they provide a minimum of 800 MHZ of processing power.

■ Can I use the EDESuite software in the MAC environment?

Currently, the Department does not support EDESuite in the MAC environment.

■ What about my Windows 95 PC(s)? Can they still be used? Will I still receive support from SFA CS?

Windows 95 should be out of date by the time these new requirements take effect. Most new PCs sold by then will offer either Windows 2000 or Windows Me as the pre-installed operating system. The Department's Customer Service representatives will continue to support Windows 95 for all software releases prior to 2002.

■ Where can I go for help?

There are many sources available to schools. Please see the back panel of this brochure for additional information.



Where to go for Help

CPS Customer Service

CPS Customer Service - 800/330-5947

Telecommunications Device for the Deaf (TDD/TTY) - 800/511-5806

E-mail: cps@ncs.com Fax: 319/358-4260

SFA Technical Support: http://www.ed.gov/offices/OSFAP/sfatech/listserv.html

Working hours are 7:00 a.m. – 7:00 p.m. (CT) Monday through Friday

- Installation Guide for EDExpress for Windows
- CPS Batch Status
- Custom/Combo/Mainframe Support for Direct Loans
- Direct Loan Technical Reference
- EDE Technical Reference
- EDExpress Software App Express, Packaging, Direct Loan, and Pell
- FISAP Software
- FISAP Technical Reference
- Packaging Technical Reference
- QAP Software
- Rejected EDE Records and Batches
- Renewal Application Processing
- SSCR-32 Software
- Use of CPS On-line Query

Customer Service Call Center

Customer Service Call Center - 800/433-7327

E-mail: sfa customer support@ed.gov Fax: 202/260-4199

Write to: U.S. Department of Education

SFA/Customer Service Call Center

ROB-3, Room 4517

400 Maryland Avenue, S.W.

Washington, D.C. 20202-5231

- Application Processing Questions
- Help with Contacting Other Staff in the U.S. Department of Education
- Title IV Program Questions
- When in doubt call the Customer Service Call Center

Title IV WAN Customer Service

Title IV WAN Customer Service - 800/615-1189

E-mail: <u>t4wan@ncs.com</u> Fax: 319/339-6983

SFA Software Download Web Site Address: http://sfadownload.ed.gov SAIG Enrollment Web Site Address: https://sfawebenroll.ed.gov Working hours are 7:00 a.m. – 7:00 p.m. (CT) Monday through Friday

- Billing and Invoices
- Campus-Based Award Letter
- EDconnect
- Network Password Changes and Resets
- Software and Document Distribution and Download
- Transmission Errors

Other Sources

- Installation Guide for EDExpress for Windows located at the SFA Download site at http://www.sfadownload.ed.gov/index.htm
- Third Party Vendors and Software Providers
- Hardware/Software Manufacturers and Retailers
- MIS Department at your school